

FIG.1A PRIOR ART

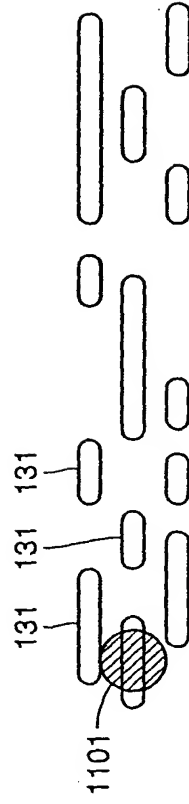


FIG.1B PRIOR ART

QUANTITY OF REFLECTED
LIGHT BEAM



FIG.1C PRIOR ART
REPRODUCED DATA



FIG.2 PRIOR ART

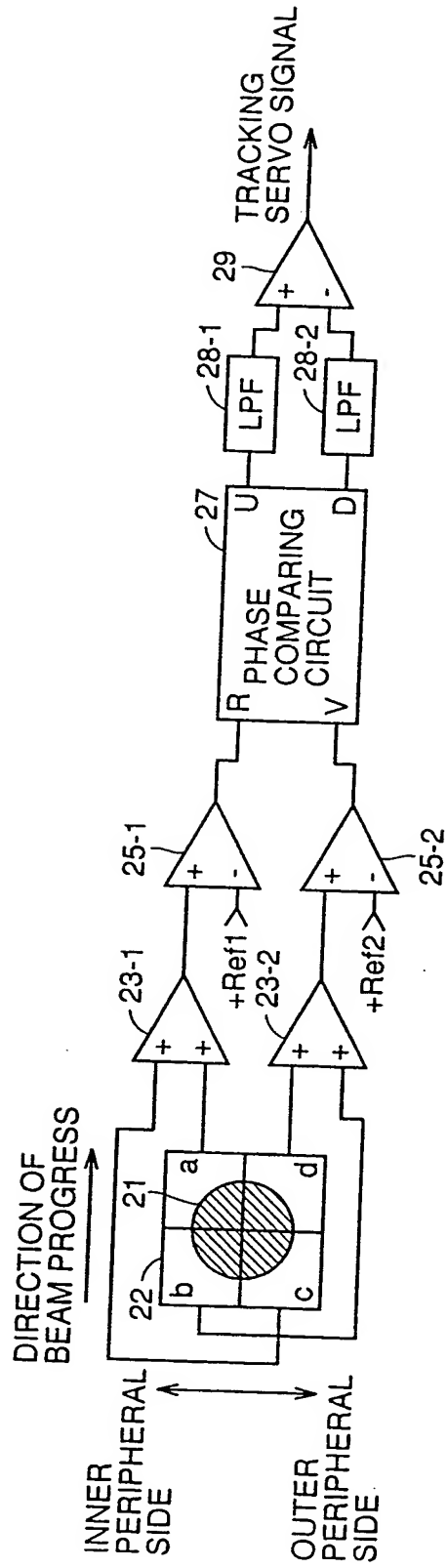


FIG.3 PRIOR ART

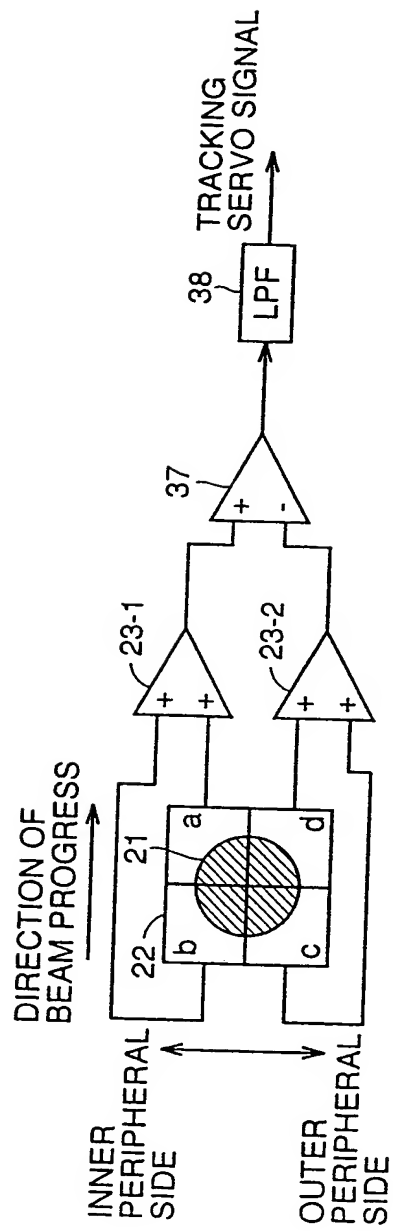


FIG. 4

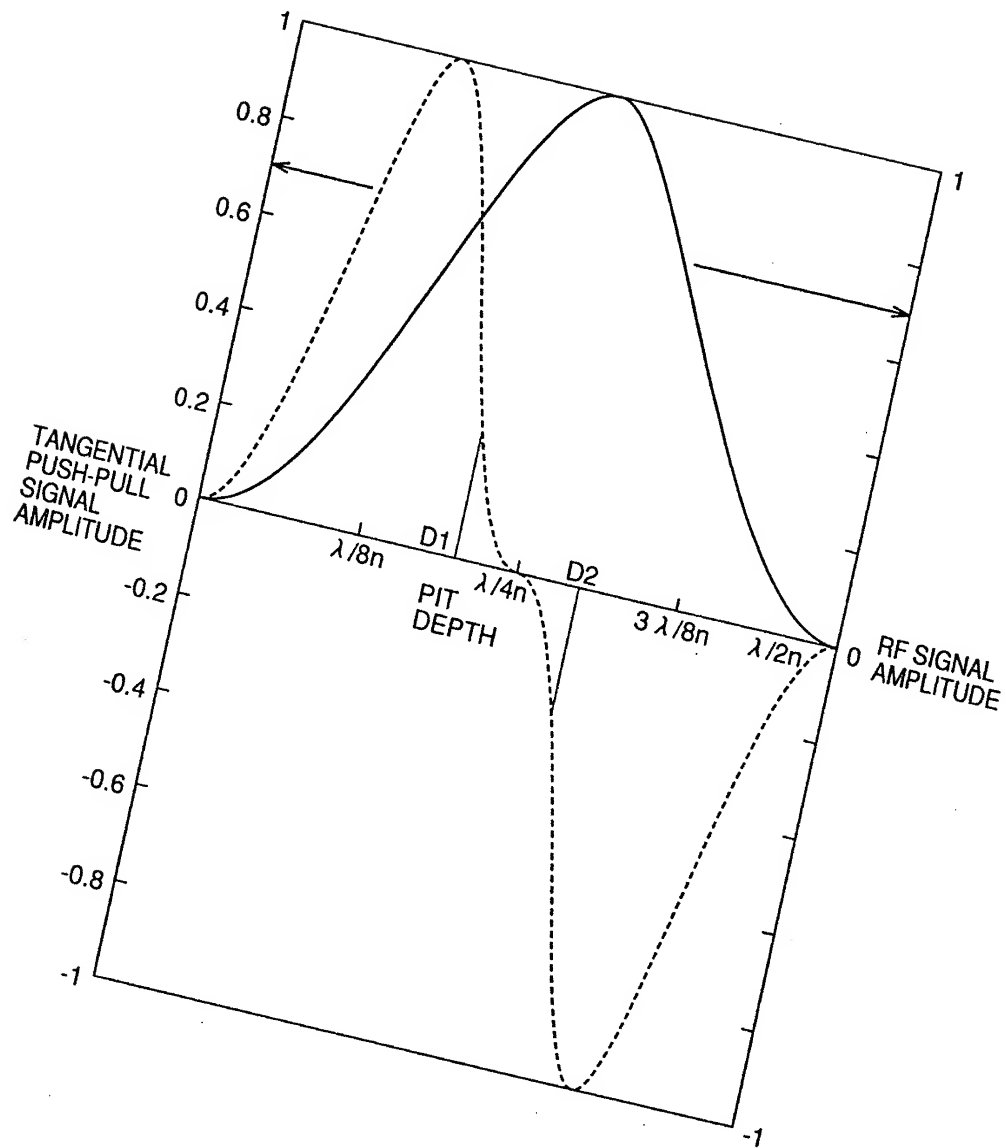


FIG.5A

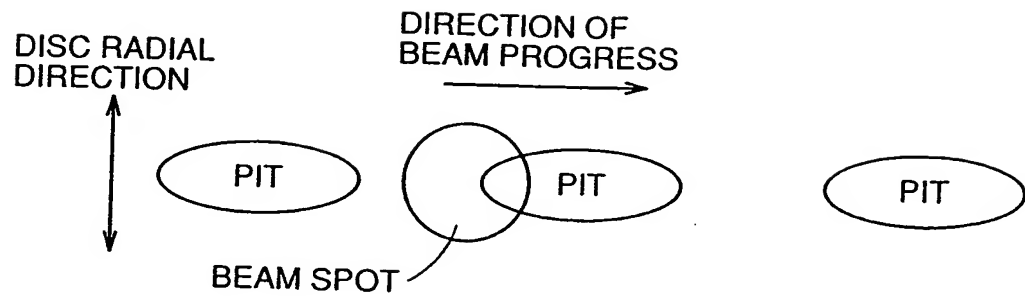
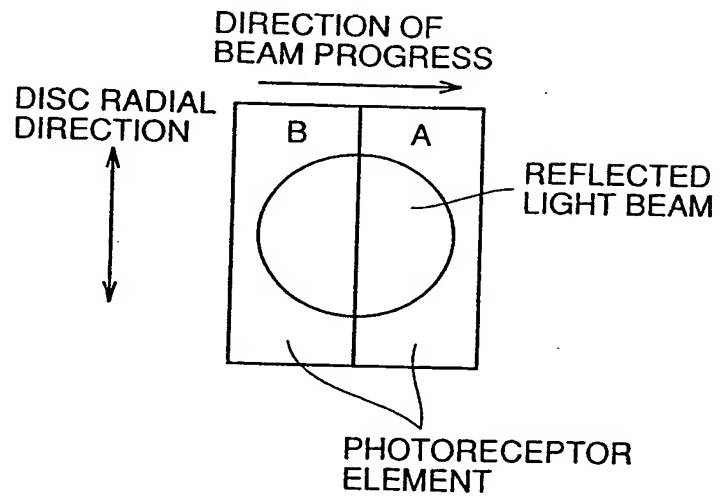


FIG.5B



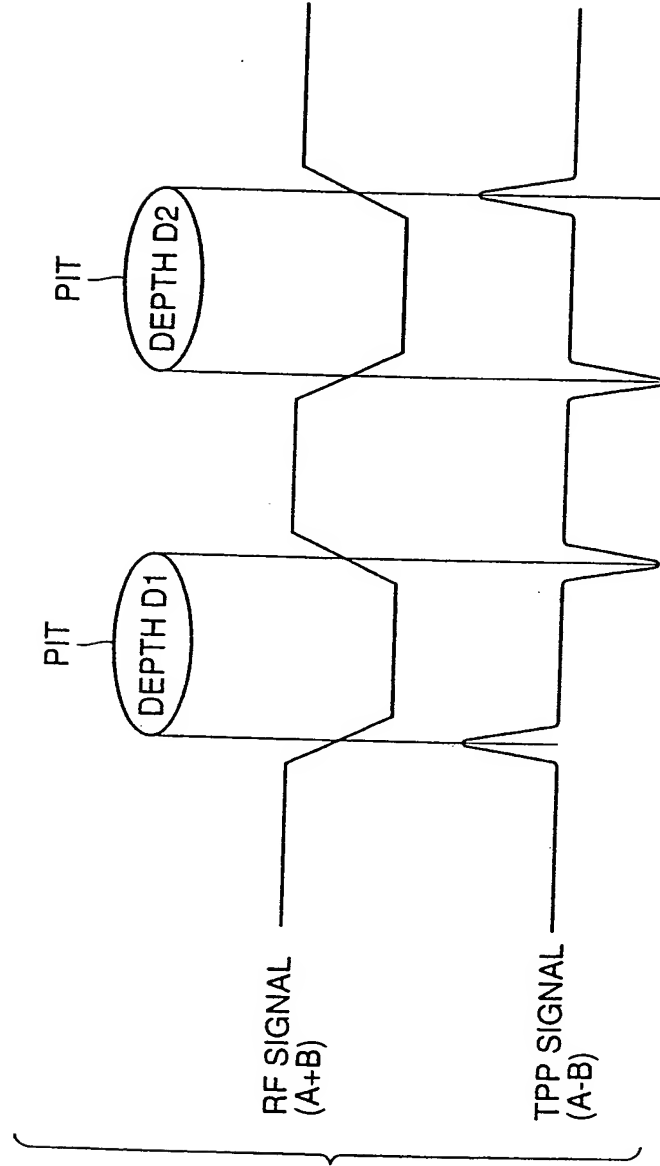
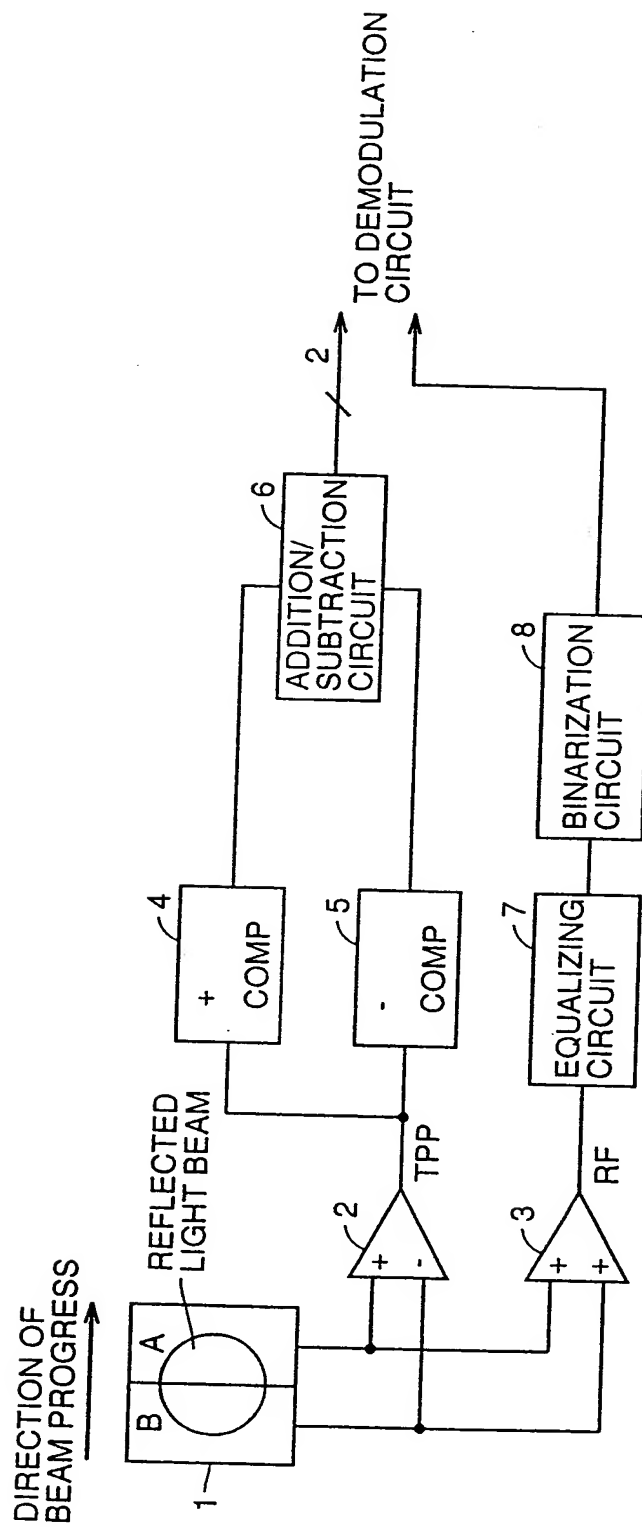


FIG. 6

FIG.7



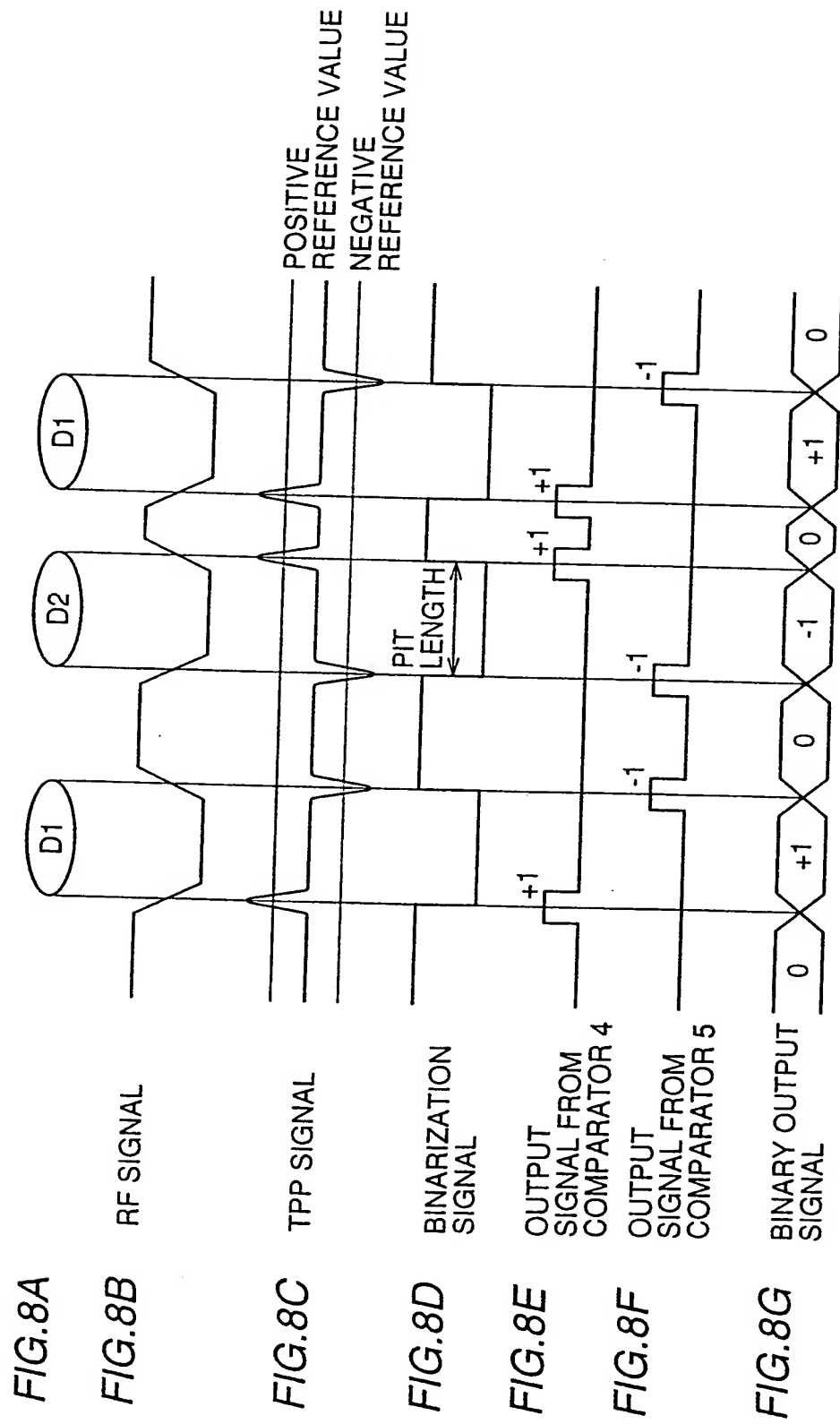
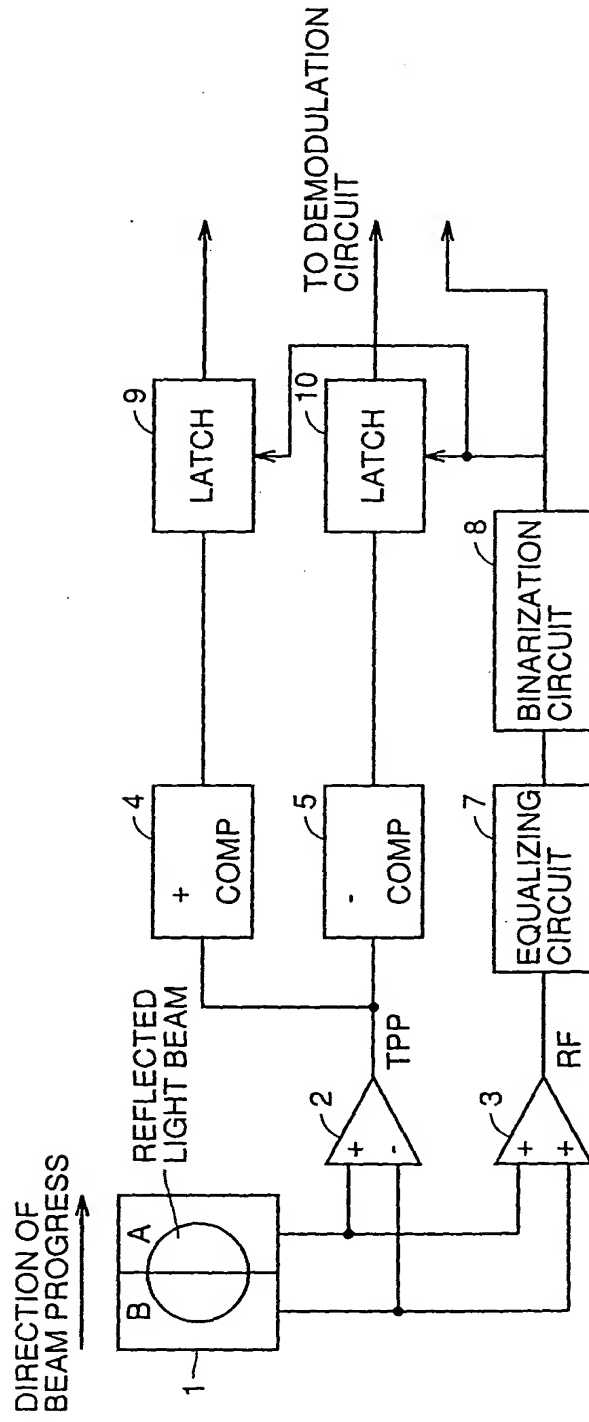


FIG. 9



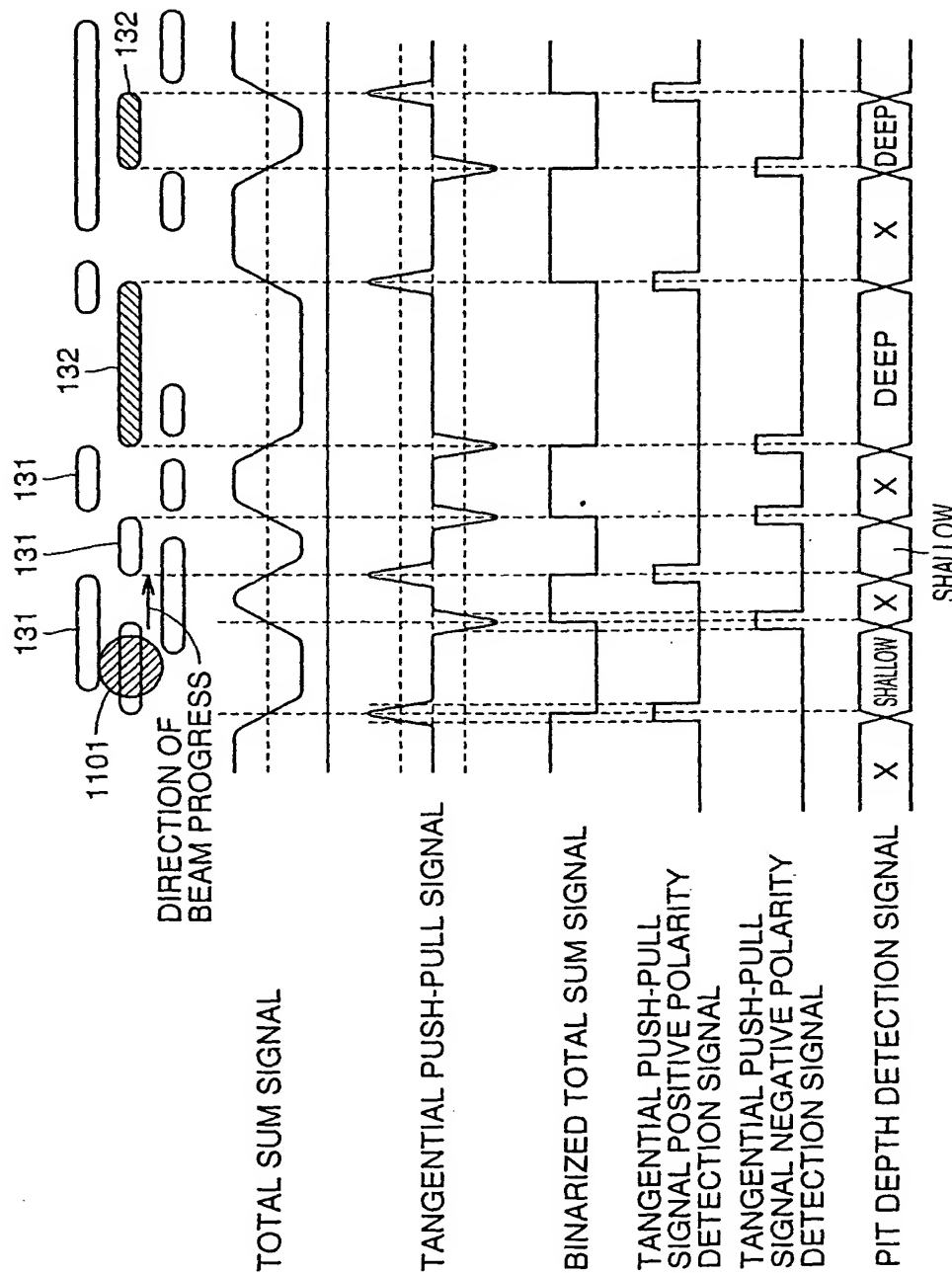


FIG.10

FIG.11

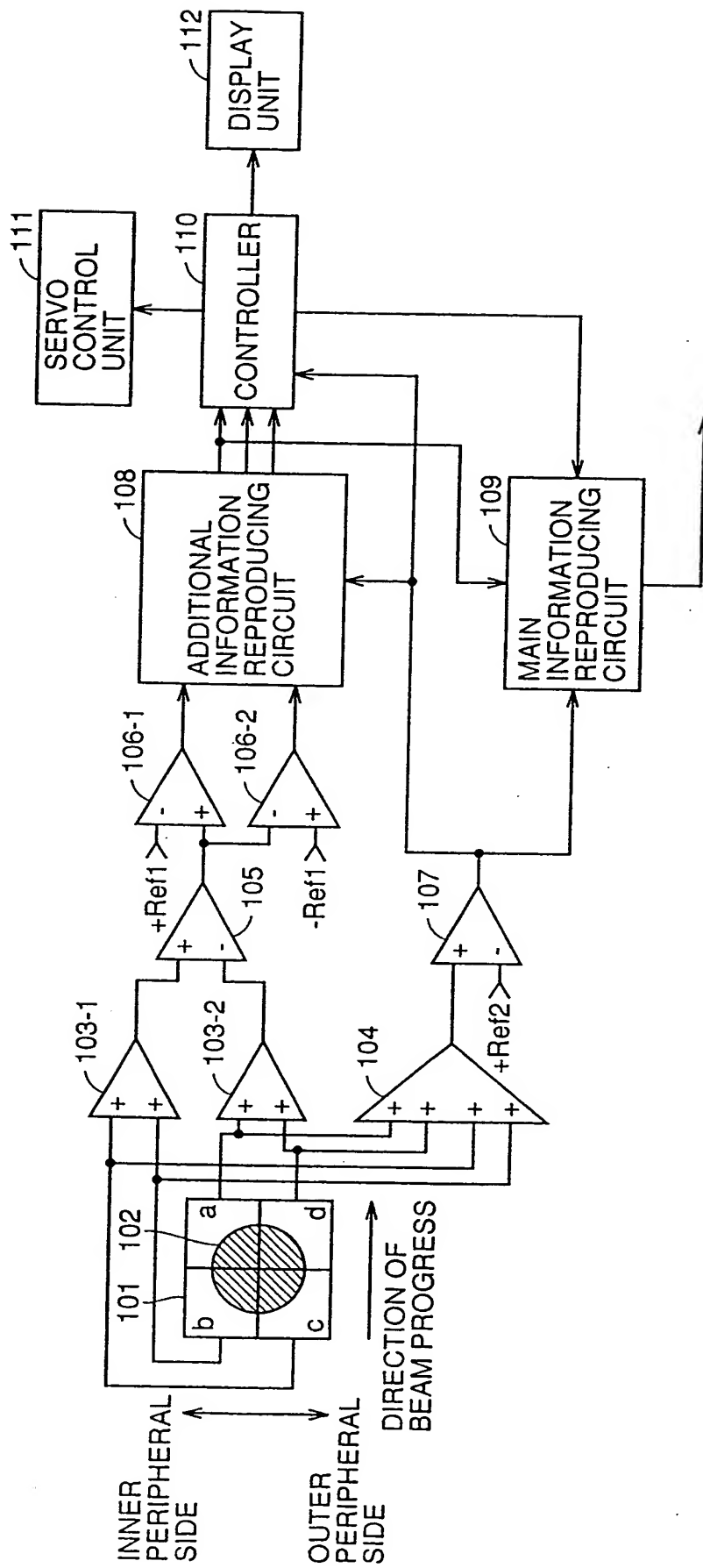
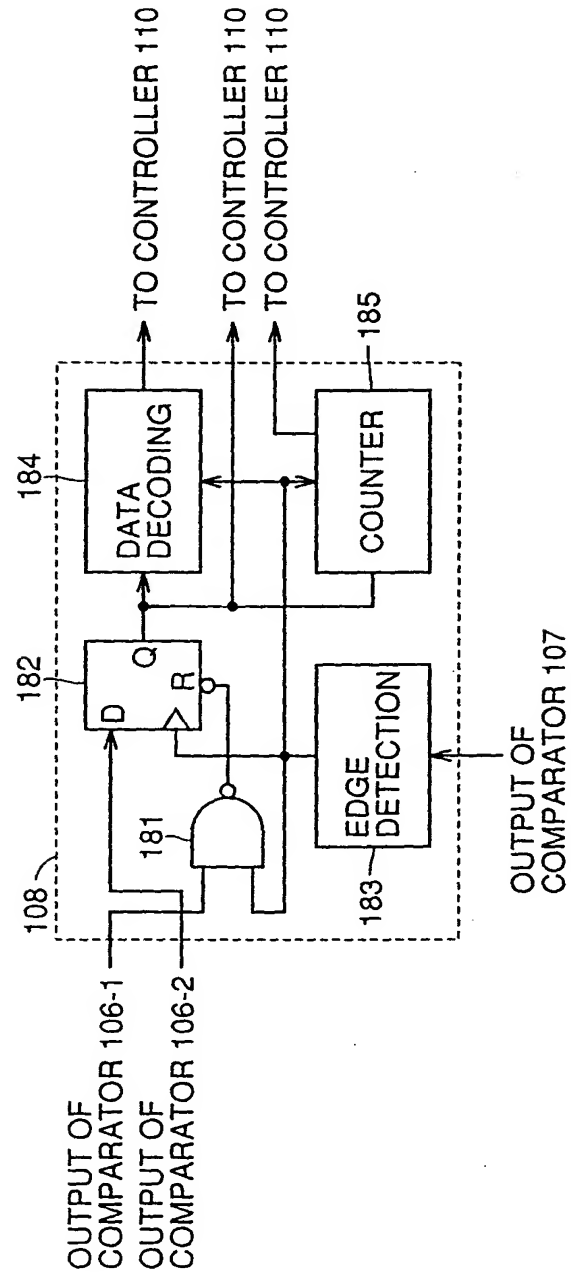
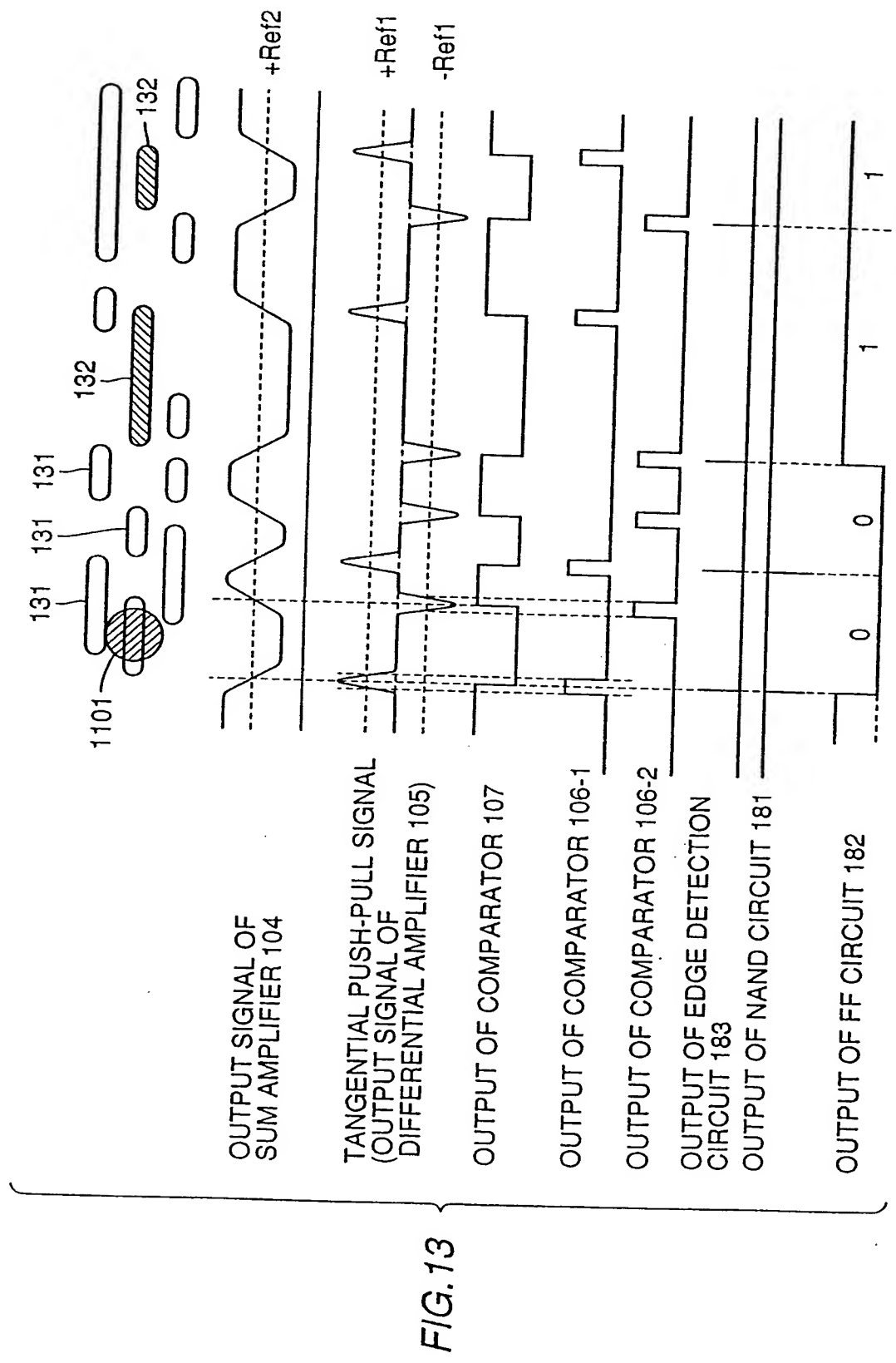
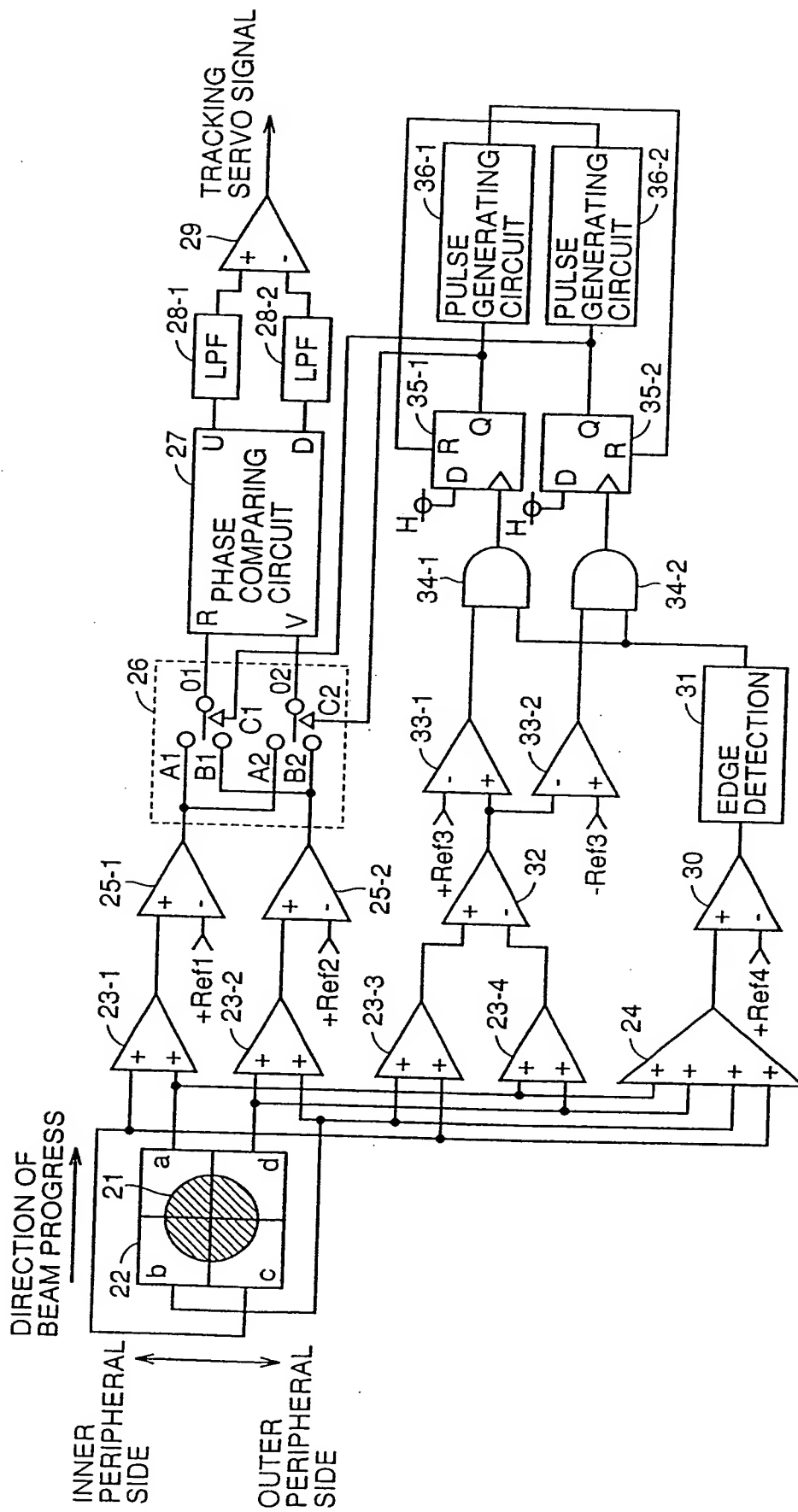


FIG. 12





The diagram illustrates a beam tracking servo system. At the top, a detector (21) is shown with four quadrants (a, b, c, d) and a central circle. It receives signals from the 'INNER PERIPHERAL SIDE' and 'OUTER PERIPHERAL SIDE'. The detector outputs four signals (A1, B1, A2, B2) which are processed by a series of comparators (23-1, 23-2, 23-3, 23-4) and summing junctions (24, 25-1, 25-2, 32). These signals are then fed into an 'R PHASE COMPARING CIRCUIT' (27) which outputs two signals (U, V) to two 'LPF' (28-1, 28-2) blocks. The outputs of the LPFs are fed into a 'TRACKING SERVO SIGNAL' block (29). The signals are also fed into a series of logic blocks including AND gates (34-1, 34-2), OR gates (33-1, 33-2), and a 'PULSE GENERATING CIRCUIT' (36-1, 36-2). The final output is an 'EDGE DETECTION' block (31).



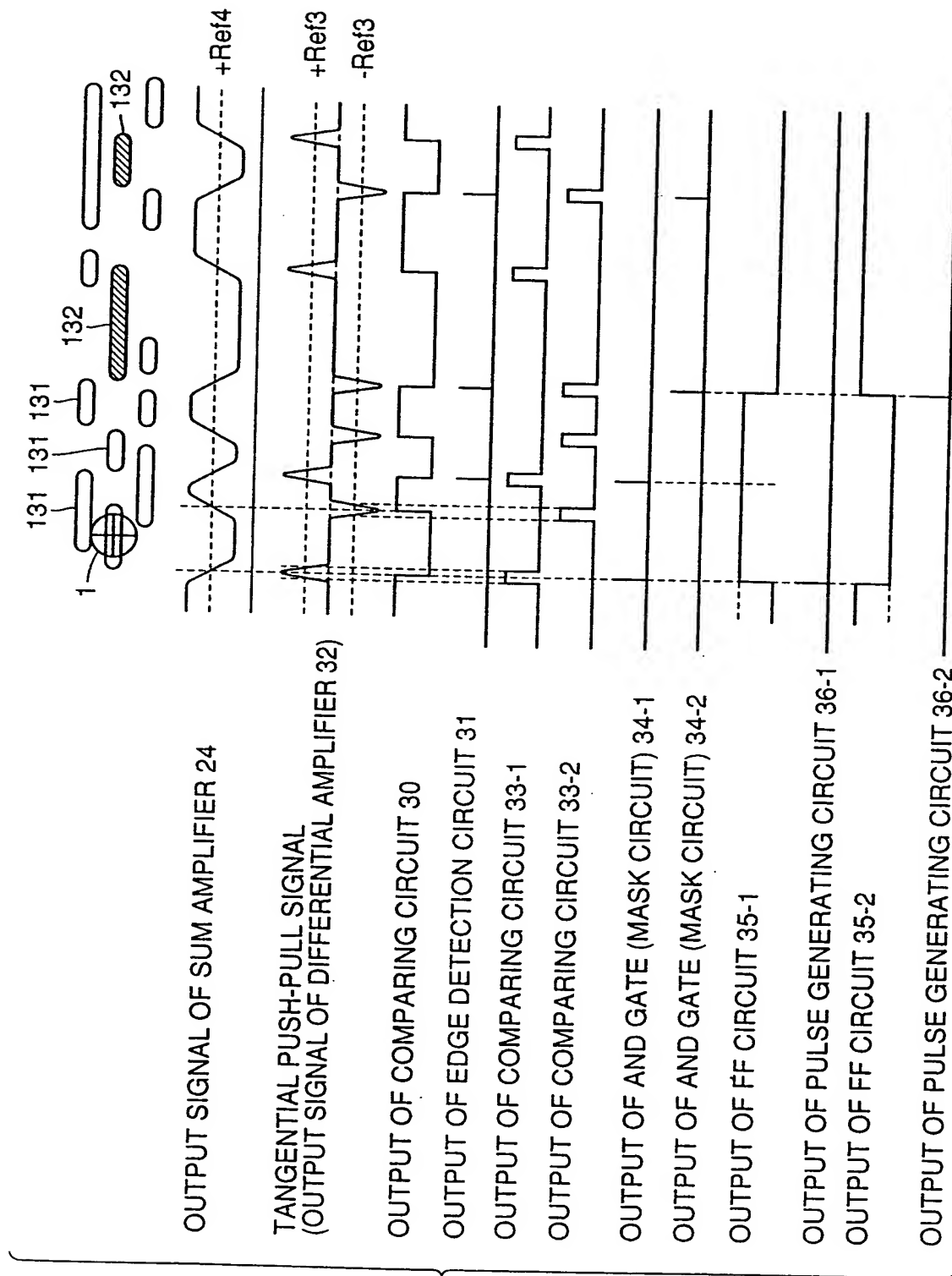


FIG. 15

FIG. 16

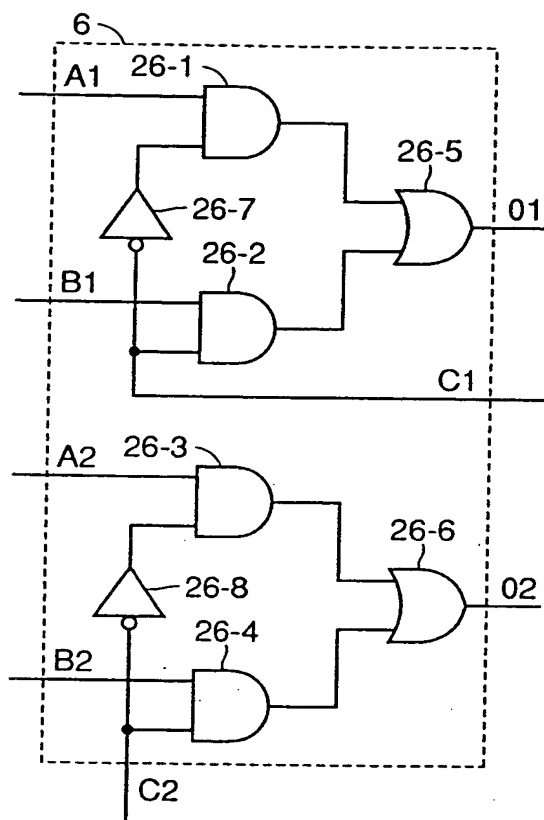


FIG.17

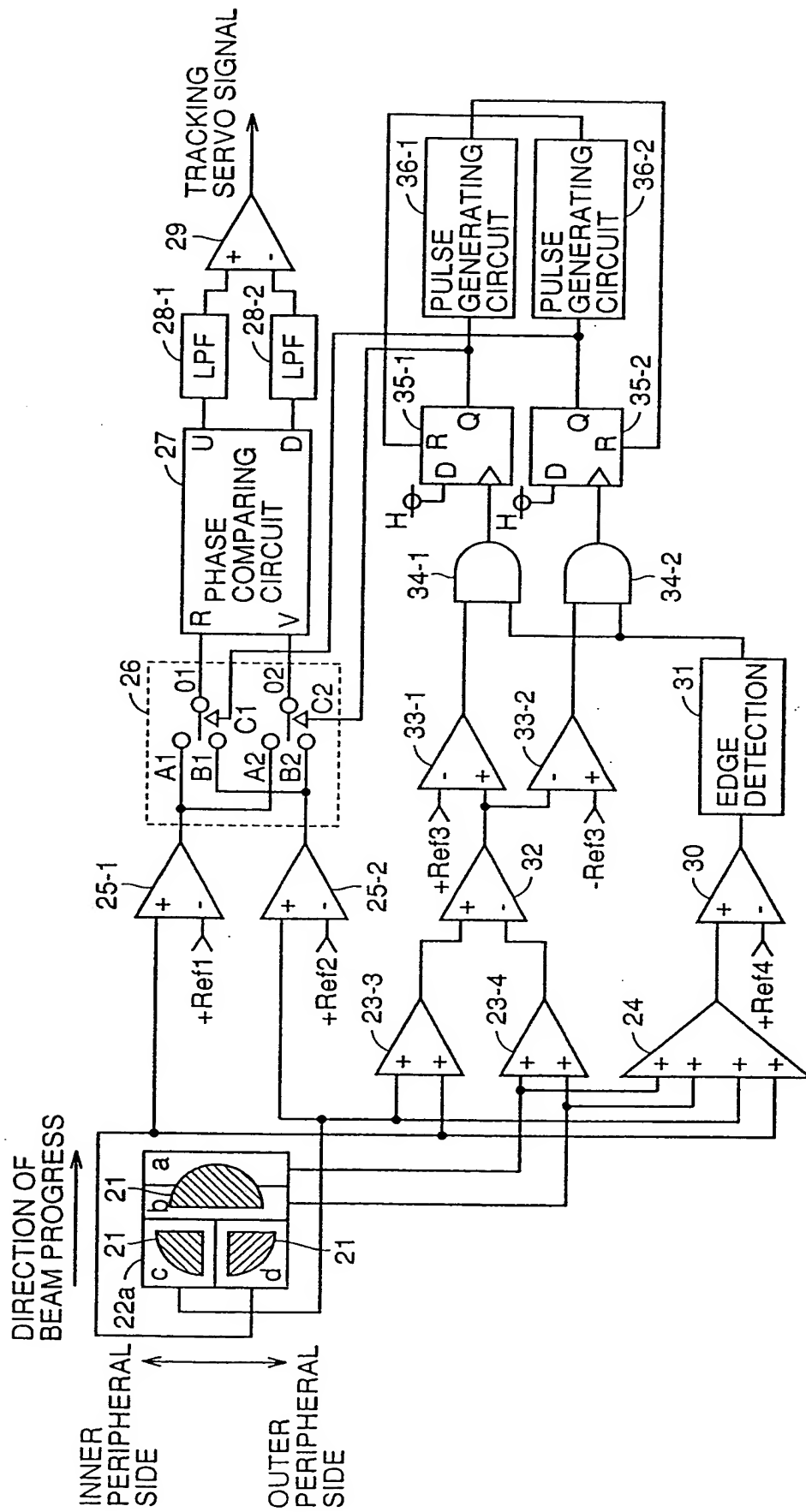


FIG.18

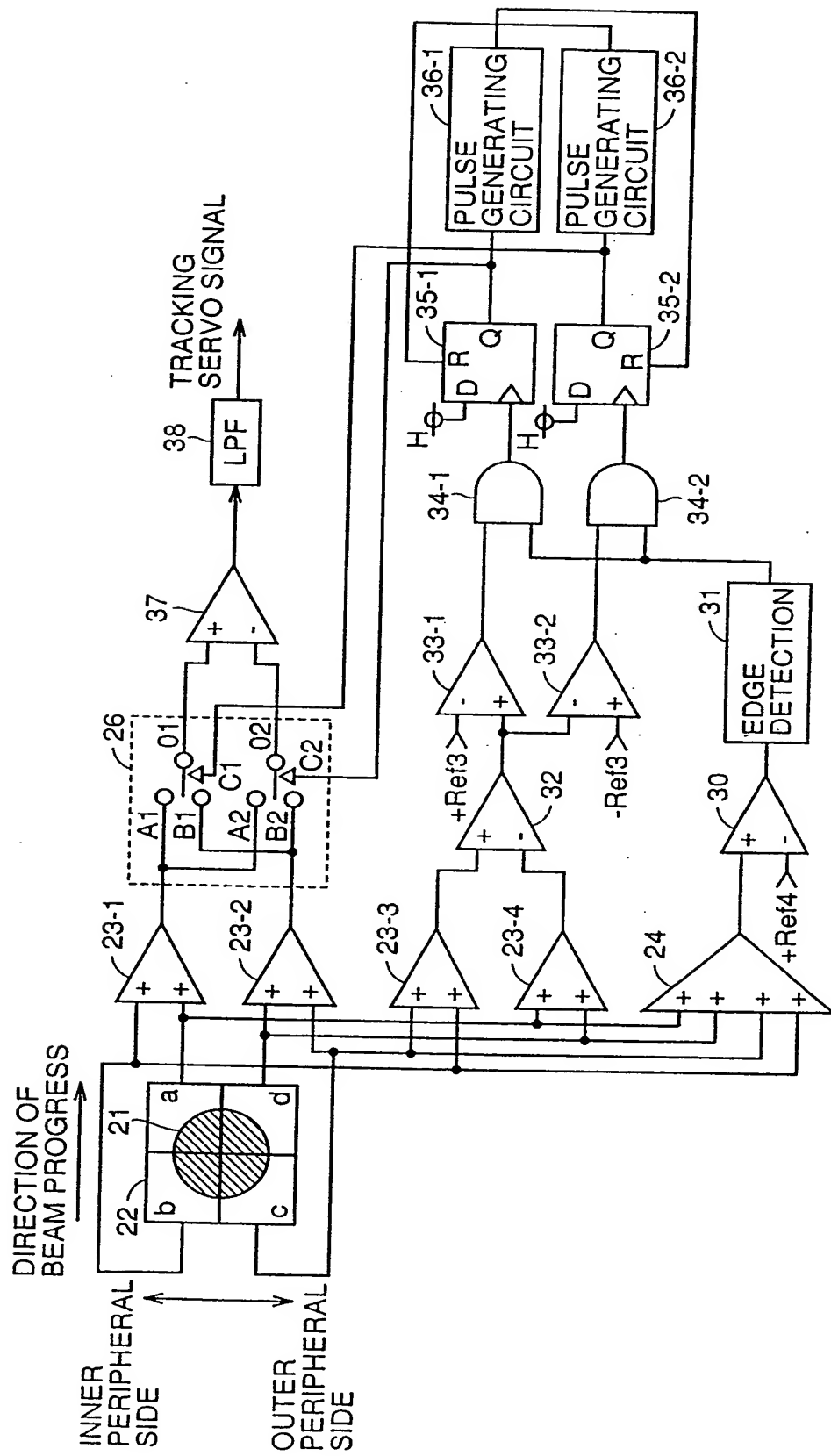


FIG.19

